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AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Dairy-Herd-Improvement Letter

ARS-44-175 (Vol. 42, No. 2)

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The National Cooperative Dairy Herd Improvement Program is a composite of the Standard (including DHIR), Owner-Sampler, and Weigh-a-Day-a-Month recordkeeping plans. On January 1, 1966, the Program included 66,298 herds consisting of 2,955,387 cows on test, which is 19.1 percent of the nation's dairy cow population. These figures represent an increase of 0.7 percent of cows on test and a net decrease of 1,610 herds and 7,170 cows in the Program from the year before.

Each of the 50 States and Puerto Rico are represented in the total program that includes 1,418 associations and 2,378 supervisors. The participation reports for the combined program and for the Standard, Owner-Sampler, and Weigh-a-Day-a-Month plans are shown in tables 1, 3, 4, and 5, respectively.

On January 1, 1966, there were 1,196 fewer herds and 28,989 fewer cows on Standard test than the year before. Average herd size was 52.9 cows. The percentage of fat test has slightly but steadily declined at an average rate of 0.013 percent per year since 1950. Herd size and the percentage of fat decline agree closely with the estimates for all U.S. dairy cows.

On January 1, 1966, 345 fewer herds, but 21,432 more cows, were on the Owner-Sampler test than in the previous year. Average herd size was 32 cows. Wisconsin had 43.7 percent of the Owner-Sampler enrollment. The Weigh-a-Day-a-Month plan had 1,160 herds consisting of 56,957 cows. Average herd size for this plan was 49.1 cows.

Central data processing at State and regional DHIA centers continues to advance. Central processing of Standard plan records (including DHIR) has reached 100 percent in 32 States. In all States the records of an average of 92.3 percent of the herds and 82.8 percent of the cows are now centrally processed. The corresponding values for records of the three plans combined are 83.8 and 78.8 percent, respectively.

Table 7 is a 10-year summary of the production of DHIA and all U.S. dairy cows. The table shows that the proportion of cows participating in the total DHIA program increased from 9.3 percent in 1956 to 19.1 percent in 1965.

A list of 511 counties having 25 percent or more of their dairy cows on one or more of the recordkeeping plans is shown in table 8.

TABLE 1.--The National Cooperative Dairy Herd Improvement Program (January 1, 1966)

			_				a 1		a-Day-			Milk cows	
State	Counties	Asso- ciations	Super- visors	Herds	dard Cows	Herds	Sampler Cows	Herds	Cows	Herds	Total Cows	Total 1/	In all plans <u>2</u> /
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Thousands	Percent
Ala Alaska Ariz	. 2	22 1 4	23 2 12	313 5 90	28,917 196 15,956	14 4 49	769 135 8,852	24 - -	1,477 -	351 9 139	31,163 331 24,808	194 2 51	16.1 16.6 48.6
Ark Calif Colo	. 43	13 30 15	13 120 21	78 1,870 221	3,437 346,141 15,526	41 209 18	1,640 21,912 953	12 - -	360 - -	131 2,039 239	5,437 368,053 16,479	162 783 106	3.4 47.0 15.5
Conn Del Fla	. 3	8 3 10	24 5 11	420 97 116	22,664 4,744 19,018	91 12 5	4,825 313 1,442	- 3 17	- 56 4,704	511 112 138	27,489 5,113 25,164	72 22 178	38.2 23.2 14.1
Ga Hawaii Idaho	. 3	31 1 37	34 1 36	394 13 559	29,550 2,300 24,983	3 15	231 387	54 3 -	5,788 132	451 16 574	35,569 2,432 25,370	170 15 178	20.9 16.2 14.3
I11 Ind Iowa	81	57 60 71	87 80 97	1,508 1,176 1,758	61,102 46,228 59,640	417 295 1,580	13,888 10,307 39,045	258 - 12	7,577 250	2,183 1,471 3,350	82,567 56,535 98,935	447 363 734	18.5 15.6 13.5
Kans Ky La	80	54 40 23	57 47 21	782 520 71	33,751 22,000 5,929	113 42 14	3,605 1,557 1,113	10 56 165	300 1,845 10,467	905 618 250	37,656 25,402 17,509	268 431 203	14.1 5.9 8.6
Maine Md Mass	20	14 36 10	28 35 23	415 789 455	18,108 44,896 20,768	99 87 81	3,766 3,944 2,668	5 -	200 - -	519 876 536	22,074 48,840 23,436	82 203 79	26.9 24.1 29.7
Mich Minn Miss	85	76 87 17	106 209 22	1,956 3,774 232	85,234 124,103 17,237	1,729 2,277 2	55,704 60,649 108	- 75	3,000	3,685 6,051 309	140,938 184,752 20,345	604 1,231 268	23.3 15.0 7.6
Mo Mont Nebr		45 6 27	42 8 29	433 63 356	19,472 3,483 15,484	58 64 77	1,817 3,476 2,900	88 - 15	2,693 300	579 127 448	23,982 6,959 18,684	544 65 271	4.4 10.7 6.9
Nev N. H N. J	10	3 9 9	4 17 26	42 248 453	4,126 12,615 25,273	1 73 36	1,169 2,480 1,850	- 2 1	153 165	43 323 490	5,295 15,248 27,288	14 43 107	37.8 35.5 25.5
N. Mex N. Y N. C	54	6 49 42	6 190 54	32 3,823 788	3,794 179,851 46,501	2,800 44	1,636 98,855 1,773	7 - 93	2,095 - 4,200	43 6,623 925	7,525 278,706 52,474	40 1,173 232	18.8 23.8 22.6
N. Dak Ohio Okla	83	18 86 14	19 166 17	156 2,360 212	5,529 94,135 12,866	46 1,496 29	1,058 40,097 1,112	73 5 5	1,352 154 238	275 3,861 246	7,939 134,386 14,216	227 568 189	3.5 23.7 7.5
Oreg Pa P. R <u>3</u> /	61	17 59 1	23 199 5	459 4,516 20	25,910 175,563 4,575	115 1,353	3,630 38,114 -	5 - 24	150 4,520	579 5,869 44	29,690 213,677 9,095	129 787 -	23.0 27.2
R. I S. C S. Dak <u>3</u> /		2 20 20	3 20 12	47 244 167	2,445 22,376 6,742	2 1 296	19 47 8,264	16 -	- 645 -	49 261 463	2,464 23,068 15,006	10 87 224	24.6 26.5 6.7
Tenn Tex Utah	82	43 26 15	39 28 18	510 349 415	28,654 28,120 20,991	5 13 39	171 800 1,147	57 12 -	1,627 690 -	572 374 454	30,452 29,610 22,138	444 459 85	6.9 6.5 26.0
Vt Va Wash		29 54 24	63 49 44	927 995 451	47,023 57,649 26,345	504 55 32	19,478 1,818 966	2 	335	1,431 1,052 483	66,501 59,802 27,311	234 280 214	28.4 21.4 12.8
W. Va Wis Wyo	24 69 6	12 57 5	19 159 5	147 3,026 28	6,613 128,895 1,134	11,871 31	646 367,203 1,499	61 - -	1,484 -	225 14,897 59	8,743 496,098 2,633	102 2,078 25	8.6 23.9 10.5
Total or percent		1,418	2,378	38,879	2,058,592	26,259	839,838	1,160	56,957	66,298	2,955,387	15,477	19.1

Preliminary figures for average number of milk cows on farms excluding heifers not yet fresh; estimated by the Statistical Reporting Service.

Percentage of cows included in the National Cooperative Dairy Herd Improvement Program.

Sessed on last report available (1-1-65).

TABLE 2.--Growth of Dairy Herd Improvement Association work in the United States (1906-1966, inclusive)

					Standard Plan					
Year	Associa-	Super-			Cows	Herds	Average p	production		
rear	tions 1/	visors 1/	Herds	Cows	per herd	reported	reported	Milk	Fat	Fat
	Number	Number	Number	Number	Number	Number	Number	Pounds	Percent	Pounds
1906	1	-	31	239	7.7	-	-	5,300	4.06	215
1907	4	-	-	1,606	-	-	-	5,366	4.10	220
1908	6 25	-	-	3,921 11,921	-	-	-	-	-	-
1910	40			2/25,000	<u>-</u> .	-	-	2/5,730	3.96	2/227
1911	64	-	-	$\frac{2}{2}$,000 $\frac{2}{40}$,000	-	_	-		-	
1912	82	-	-	2/43,000	-	-	-	-	-	-
1913	100	-	-	47,150	-	-	-	-	-	-
1914 1915	163 211	-	_	73,280 105,526			_		-	-
1916	346	_	_	150,677	_	_	_	_	_	_
1917	459	_	11,720	216,831	18.5	-	-	-	-	-
1918	353	-	9,778	172,518	17.6	-	-	-	-	-
1919	385	-	10,000	167,313	16.7 17.0	-	-	6,175	4.00	247
1920 1921	468 452		11,948 11,209	203,472 193,928	17.3	-		0,1/3	-	
1922	513	-	12,508	215,321	17.2	-	_	-	-	-
1923	627	-	16,357	277,010	16.9	-	-	-	-	-
1924 <u>3</u> /		-			16 /	-	42 202	7 100	3.95	204
1925	732	-	18,677 19,540	307,073	16.4 16.8	-	42,302 103,443	7,189 7,331	3.96	284 290
1926 1927	777 837		21,128	327,653 362,014	17.1	Ξ	116,509	7,411	3.95	293
1928	947	_	23,327	414,891	17.8	-	152,412	7,476	3.96	296
1929	1,090	-	26,182	465,804	17.8	-	194,859	7,498	3.97	298
1930	1,143	-	27,888	507,549	18.2	-	235,624	7,642	3.96	303
1931	1,112	-	26,308 20,351	510,714 427,044	19.4 21.0	-	219,924 186,683	7,812 7,858	3.92 3.95	306 310
1932 1933	1,005 881		15,447	358,501	23.2	_	163,014	7,849	3.99	313
1934	793	_	13,694	325 837	23.8	-	203,930	8,015	4.02	322
1935	809	-	15,573	364,218	23.4	-	200,367	7,977	4.04	322
1936	876	-	17,344	404,412	23.3	-	257,248	7,912 7,923	4.03	319
1937	992 1,106		20,772 23,701	496,562 558,993	23.9 23.6	_	354,568 448,025	7,831	4.04 4.05	320 317
1938 1939	1,228		25,949	625,284	24.1	_	507,563	7,977	4.05	323
1940	1,300	-	27,948	676,141	24.2	-	545,382	8,133	4.07	331
1941	1,383	-	31,381	763,502	24.3	-	591,103	8,225	4.07	335
1942	1,421	-	32,957	816,117	24.8	-	514,758 375,914	8,323 8,325	4.07 4.06	339 338
1943	1,057 954	-	24,155 20,825	616,972 561,587	25.5 27.0		383,337	8,296	4.05	336
1945	949	-	21,254	577,200	27.2	_	384,360	8,592	4.03	346
1946	1,124	-	23,331	627,878	27.0	-	384,360 413,554	8,635	4.04	349
1947	1,426	-	28,812	775,546	26.9	-	533,061	8,638	4.03	348 350
1948	1,668	-	33,274	886,129 943,939	26.6 26.3	-	620,385 729,150	8,675 8,907	4.03 4.03	359
1949	1,787 1,973	-	35,851 40,100	1,088,872	27.2		836,922	9,172	4.03	370
1951	2,143		42,949	1,186,615	27.6	_	885.859	9,195	4.02	370
1952	2,109	-	40,105	1,166,297	29.1	-	928,376	9,192	3.98	366
1953	2,151	-	40,983	1,226,588	29.9	-	1,020,326	9,253	3.98	368
1954	2,175	-	41,254	1,311,698	31.8	-	1,079,557 1,175,378	9,363 9,502	3.97 3.95	372 375
1955 1956	2,288 2,266	-	41,240 40,984	1,333,866 1,406,306	32.3 34.4	_	1,229,971	9,713	3.94	383
1957 4/	1,700	2,310	41,638	1,479,799	35.5	_	1,256,129	9,894	3.93	389
1958	1,544	2,293	39,985	1,548,884	38.7	-	1.345.750	10,068	3.91	394
1959	1,500	2,337	40,284	1,607,538	39.9		1,406,665	10,327	3.88	401
1960	1,509	2,397	41,293	1,746,752	42.3	20 640	/1,343,725	5/10,561 10,796	<u>5</u> /3.87 3.87	<u>5</u> /409 418
1961 1962	1,395 1,436	2,448 2,472	42,558 42,034	1,867,469 1,958,355	43.9 46.6	28,649 32,794	1,280,785 1,531,826	11,032	3.86	426
1963	1,441	2,472	41,937	2,006,534	47.8	35,378	1,674,803	11,286	3.85	434
1964	1,420	2,474	40,670	2,010,144	49.4	35,689	1,746,475	11,685	3.83	447
1965	1,424	2,439	40,075	2,087,581	52.1	35,604	1,821,252	11,976	3.82	457
1966	1,418	2,378	38,879	2,058,592	52.9	-	-	-	-	-

^{1/} Number of associations and supervisors include all plans.
2/ Estimated.
3/ Date for collecting data changed in 1924 from July 1 to January 1.
4/ Prior to 1957 associations were counted on the basis of supervisor circuits.
5/ National testing year changed in 1960 to begin May 1. These values are averages of 1959 and 1961.

TABLE 3.--Standard DHIA recordkeeping in the United States (January 1, 1966)

State	Counties	Herds	Cows	Av. cows per herd	All milk cows 1/	DHIA cows as pct. of all milk cows 2/
<u>Juace</u>	Number	Number	Number	Number	Thousands	Percent
. 1						
Ala		313 5	28,917 196	92.4 39.2	194 2	14.9 9.8
Alaska		90	15,956	177.3	51	31.3
ALIZ		,,	15,750	277.5	31	31.3
Ark	. 13	78	3,437	44.1	162	2.1
Calif		1,870	346,141	185.1	783	44.2
Colo	16	221	15,526	70.3	106	14.6
C	۰	420	22 664	54.0	72	31.5
Del		97	22,664 4,744	54.0 48.9	72 22	21.6
F1a		116	19,018	163.9	178	10.7
Ga		394	29,550	75.0	170	17.4
Hawaii		13	2,300	176.9	15	15.3
Idaho	27	559	24,983	44.7	178	14.0
I11	82	1,508	61,102	40.5	447	13.7
Ind		1,176	46,228	39.3	363	12.7
Iowa		1,758	59,640	33.9	734	8.1
Kans		782	33,751	43.2	268	12.6
Ку		520	22,000	42.3	431	5.1
La	23	71	5,929	83.5	203	2.9
Maine	14	415	18,108	43.6	82	22.1
Md		789	44,896	56.9	203	22.1
Mass	11	455	20,768	45.6	79	26.3
)(1 ala	72	1 056	05 224	42.6	604	1.6 1
Mich		1,956 3,774	85,234	43.6 32.9	604 1,231	14.1
Minn		232	124,103 17,237	74.3	268	10.1 6.4
		232	1.,25.		200	0
Mo		433	19,472	45.0	544	3.6
Mont		63	3,483	55.3	65	5.4
Nebr	52	356	15,484	43.5	271	5.7
Nev	5	42	4,126	08.2	14	29.5
N. H		248	12,615	98.2 50.9	43	29.3
N. J		453	25,273	55.8	107	23.6
			,			
N. Mex		32	3,794	118.6	40	9.5
N. Y		3,823	179,851	47.0	1,173	15.3
N. C	82	788	46,501	59.0	232	20.0
N. Dak	26	156	5,529	35.4	227	2.4
Ohio		2,360	94,135	39.9	568	16.6
0k1a		212	12,866	60.7	189	6.8
Oreg		459	25,910	56.4	129	20.1
Pa		4,516	175,563	38.9	787	22.3
P. R <u>3</u> /	5	20	4,575	228.8	-	-
R. I	5	47	2,445	52.0	10	24.5
S. C		244	22,376	91.7	87	25.7
S. Dak 3/		167	6,742	40.4	224	3.0
Town	E 0	F * 0				
Tenn Tex	53 72	510	28,654	56.2	444	6.5
Utah	73 18	349 415	28,120 20,991	80.6 50.6	459 85	6.1
	10	717	20,791	50.6	0.5	24.7
Vt	13	927	47,023	50.7	234	20.1
Va	78	995	57,649	57.9	280	20.6
Wash	24	451	26,345	58.4	214	12.3
W. Va	24	1 / 7	((12	45.0	1.00	
Wis	69	147 3,026	6,613 128,895	45.0 42.6	102	6.5
Wyo	6	28	1,134	42.6 40.5	2,078 25	6.2 4.5
•			1,134	-0.5		
Total, average or percent	1.916	38,879	2 059 502	E2 0	15 477	12.2
o- Por come	-,	30,079	2,058,592	52.9	15,477	13.3

Preliminary figures for average number of milk cows on farms excluding heifers not yet fresh; estimated by the Statistical Reporting Service.

2/ Percentage of cows included in the Standard (including DHIR) recordkeeping plan.

3/ Based on last report available (1-1-65).

TABLE 4.--Owner-Sampler recordkeeping in the United States (January 1, 1966)

State	Counties	Herds	Cows	Av. cows per herd	All milk cows 1/	O.S. cows as pct. of all milk cows 2/
	Number	Number	Number	Number	Thousands	Percent
Ala	8	14	769	54.9	194	0.4
Alaska	ĭ	4	135	33.8	2	6.8
Ariz	3	49	8,852	180.7	51	17.4
Ark	10	41	1,640	40.0	162	1.0
Calif	31	209	21,912	104.8	783	2.8
Colo	7	18	953	52.9	106	•9
Camp	8	91	/ 925	53.0	72	6.7
Del	2	12	4,825 313	26.1	22	1.4
Fla	5	5	1,442	288.4	178	.8
Co	1.	3	231	77.0	170	.1
Ga	1.		-	-	15	
Idaho	7	15	387	25.8	178	• 2
T11	25	417	12 000	22.2	447	3.1
IllInd	35 11	417 295	13,888 10,307	33.3 34.9	363	2.8
Iowa	86	1,580	39,045	24.7	734	5.3
					269	1.3
Kans Ky	29 14	113 42	3,605 1,557	31.9 37.1	268 431	.4
La	6	14	1,113	79.5	203	.5
Maine	12	99	3,766	38.0 45.3	82 203	4.6 1.9
Md	9 9	87 81	3,944 2,668	32.9	79	3.4
riass	,					
Mich	71	1,729	55,704	32.2	604	9.2 4.9
Minn	81 2	2,277	60,649 108	26.6 54.0	1,231 268	4.7
Miss	2	2	100	34.0		
Mo	13	58	1,817	31.3	544	.3
Mont	7	64	3,476	54.3 37.7	65 271	5.3 1.1
Nebr	16	77	2,900	37.7	2/1	1.1
Nev	1	1	1,169	1169.0	14	8.4
N. H	10	73	2,480	34.0	43	5.8
N. J	5	36	1,850	51.4	107	1.7
N. Mex	2	4	1,636	409.0	40	4.1
N. Y	54	2,800	98,855	35.3	1,173	8.4
N. C	19	44	1,773	40.3	232	.8
N. Dak	17	46	1,058	23.0	227	•5
Ohio	80	1,496	40,097	26.8	568	7.1
0kla	16	29	1,112	38.3	189	•6
Oreg	21	115	3,630	31.6	129	2.8
Pa		1,353	38,114	28.2	787	4.8
P. R 3/	-	-	-	-	-	-
р т	2	2	19	9.5	10	. 2
R. I S. C		i	47	47.0	87	.1
S. Dak 3/	38	296	8,264	27.9	224	3.7
_		E	171	34.2	444	_
Tenn Tex	4 13	5 13	171 800	61.5	459	.2
Utah	12	39	1,147	29.4	85	1.3
	10	F0/	·	20 (224	0 3
Vt	13 14	504 55	19,478 1,818	38.6 33.1	234 280	8.3
Wash		32	966	30.2	214	.5
	_					
W. Va		17 11 871	646 367 203	38.0 30.9	102 2 078	.6 17.7
Wyo	3	11,871 31	367,203 1,499	30.9 48.4	2,078 25	6.0
, -						
Total, average	, 056	26.250	020 020	22.0	15 /77	E /
or percent	956	26,259	839,838	32.0	15,477	5.4

Preliminary figures for average number of milk cows on farms during year excluding heifers not yet fresh; estimated by the Statistical Reporting Service.

2/ Percentage of cows included in the Owner-Sampler recordkeeping plan.

3/ Based on last report available (1-1-65).

TABLE 5.--Weigh-a-Day-a-Month recordkeeping in the United States (January 1, 1966)

	,			Av. cows	All milk	WADAM cows as pct.
State	Counties	Herds	Cows	per herd	cows 1/	of all milk cows 2/
	Number	Number	Number	Number	Thousands	Percent
Ala		24	1,477	61.5	194	0.8
Alaska Ariz		Ξ	-	-	2 51	-
AI IZ	_	_	_	_	31	
Ark		12	360	30.0	162	. 2
Calif Colo		_		-	783 106	-
Conn Del		3	- 56	18.7	72 22	.3
Fla	9	17	4,704	276.7	178	2.6
0.	20	F.4.		107.2	170	2.4
Ga Hawaii		54 3	5,788 132	107.2 44.0	170 15	3.4 .9
Idaho	-	-	-	-	178	-
I11	36	258	7,577	29.4	447	1.7
Ind	-	-	-,5//	-	363	-
Iowa	3	12	250	20.8	734	-
Kans	10	10	300	30.0	268	.1
Ку	12	56	1,845	32.9	431	.4
La	28	165	10,467	63.4	203	5.2
Maine	2	5	200	40.0	82	. 2
Md	=	-	-	-	203	<u> </u>
Mass	-	-	-	-	79	-
Mich	-	_	-	-	604	-
Minn	-	-		, <u>-</u>	1,231	,-,
Miss	10	75	3,000	40.0	268	1.1
Mo	12	88	2,693	30.6	544	•5
Mont Nebr	8	15	300	20.0	65 271	- .1
Went	Ü	13	300	20.0	2/1	• ±
Nev	-	-	-	-	14	-,
N. H N. J	1 1	2 1	153 165	76.5 165.0	43 107	.4
N. Mex	4	7	2,095	299.3	40	5.2
N. Y N. C	36	93	4,200	45.2	1,173 232	1.8
N. Dak Ohio	26 1	73 5	1,352 154	18.5 30.8	227 568	.6
0kla	3	5	238	47.6	189	.1
0	2	-	150		100	
Oreg	3	5	150	30.0	129 787	<u>.</u> 1
P. R 3/	14	24	4,520	188.3	-	-
R. I					10	
S. C	5	16	- 645	40.3	10 87	<u>-</u> .7
S. Dak 3/	-	-	-	<u>-</u> '	224	-
Tenn	24	57	1,627	28.5	444	.4
Tex	12	12	690	57.5	459	. 2
Utah	-	-	-	-	85	-
Vt	_	-	_	_	234	
Va	2	2	335	167.5	280	.1
Wash	-	-	-	-	214	-
W. Va	22	61	1,484	24.3	102	1.5
Wis	-	-	-	-	2,078	-
Wyo					25	
Total, average	,					
or percent	329	1,160	56,957	49.1	15,477	.4

Preliminary figures for average number of milk cows on farms during year excluding heifers not yet fresh; estimated by the Statistical Reporting Service.

Percentage of cows included in the Weigh-a-Day-a-Month recordkeeping plan.

Based on last report available (1-1-65).

TABLE 6.--Herds and cows enrolled in State and regional computing centers (January 1, 1966)

State	Stand	ard DHIA (I	ncl. DHI	ι)	Dairy He	rd Im- t Registry	Owner.	-Sampler		machine sing <u>l</u> /	Machine-pro percent o recordkee	of total
	Herds	Cows	Herds	Cows	Herds	Cows	Herds	Cows	Herds	Cows	Herds	Cows
	Number	Number	Pct.2/	Pct.2/	Number	Number	Number	Number	Number	Number	Pct.	Pct.
Ala	313	28,917	100.0	100.0	16	1,455	9	476	322	29,393	91.7	94.3
Alaska	5	196	100.0	100.0	3	101	4	135	9	331	100.0	100.0
Ariz	37	5,618	41.1	35.2	15	2,614	2	133	39	5,751	28.1	23.2
Ark	78	3,437	100.0	100.0	14	567	41	1,640	119	5,077	90.8	93.4
Calif	290	63,610	15.5	18.4	76	12,053	6	1,637	296	65,247	14.2	17.7
Colo	221	15,526	100.0	100.0	35	1,981	17	874	238	16,400	99.6	99.5
Conn	420	22,664	100.0	100.0	93	5,305	61	2,731	481	25,395	94.1	92.4
Del	97	4,744	100.0	100.0	7	316	12	313	109	5,057	97.3	98.9
Fla	116	19,018	100.0	100.0	9	1,053	1	135	117	19,153	84.8	76.1
Ga Hawaii Idaho	394 5 330	29,550 676 15,369	100.0 38.5 59.0	100.0 29.4 61.5	39 - 40	3,339 1,529	3 14	231 326	423 5 344	33,265 676 15,695	93.8 31.3 59.9	93.5 27.8 61.9
Ill	1,508	61,102	100.0	100.0	141	6,164	269	8,938	1,890	73,540	86.6	89.1
Ind	1,176	46,228	100.0	100.0	199	7,539	85	2,513	1,261	48,741	85.7	86.2
Iowa	1,758	59,640	100.0	100.0	248	8,506	1,183	28,883	2,941	88,523	87.8	89.5
Kans	782	33,751	100.0	100.0	130	4,650	113	3,605	895	37,356	98.9	99.2
Ky	520	22,000	100.0	100.0	57	2,300	42	1,557	573	23,857	92.7	93.9
La	59	4,654	83.1	78.5	5	440	14	1,113	238	16,234	95.2	92.7
Maine	415	18,108	100.0	100.0	60	2,829	99	3,766	514	21,874	99.0	99.1
Md	743	41,647	94.2	92.8	117	8,023	83	3,794	826	45,441	94.3	93.0
Mass	439	19,989	96.5	96.2	79	3,805	72	2,393	511	22,382	95.3	95.5
Mich	1,956	85,234	100.0	100.0	242	12,111	1,580	51,104	3,536	136,338	96.0	96.7
Minn	3,331	110,652	88.3	89.2	181	6,938	2,068	55,081	5,399	165,733	89.2	89.7
Miss	227	16,933	97.8	98.2	22	1,464	2	108	239	17,441	77.3	85.7
Mo	433	19,472	100.0	100.0	66	3,262	36	1,211	469	20,683	81.0	86.2
Mont	45	2,349	71.4	67.4	9	469	45	2,529	90	4,878	70.9	70.1
Nebr	334	14,516	93.8	93.7	54	2,641	77	2,900	411	17,416	91.7	93.2
Nev	34	3,726	81.0	90.3	11	902	1	1,169	35	4,895	81.4	92.4
N. H	248	12,615	100.0	100.0	52	2,440	51	1,760	301	14,528	93.2	95.3
N. J	453	25,273	100.0	100.0	64	3,582	36	1,850	490	27,288	100.0	100.0
N. Mex N. Y N. C	30 3,823 788	3,496 179,851 46,501	93.8 100.0 100.0	92.1 100.0 100.0	11 419 84	716 2,095 5,175	2,397 44	85,253 1,773	30 6,220 913	3,496 265,104 51,974	81.1 93.9 98.7	61.6 95.1 99.0
N. Dak	150	5,329	96.2	96.4	20	799	28	804	230	6,989	83.6	88.0
Ohio	2,360	94,135	100.0	100.0	499	20,909	464	12,308	2,824	106,443	73.1	79.2
Okla	212	12,866	100.0	100.0	46	2,599	29	1,112	241	13,978	98.0	98.3
Oreg Pa P. R <u>3</u> /	266 4,516 20	16,450 175,563 4,575	58.0 100.0 100.0	63.5 100.0 100.0	40 265 -	2,310 12,104	45 1,353 -	1,870 38,114	311 5,869 20	18,320 213,677 4,575	53.7 100.0 45.5	61.7 100.0 50.3
R. I	45	2,325	95.7	95.1	20	841	1	11	46	2,336	93.9	94.8
S. C	244	22,376	100.0	100.0	39	3,852	1	47	245	22,423	93.9	97.2
S. Dak <u>3</u> /-	167	6,742	100.0	100.0	29	1,233	45	1,337	212	8,079	45.8	53.8
Tenn	510	28,654	100.0	100.0	59	4,125	5	171	518	29,000	90.6	95.2
Tex	318	25,898	91.1	92.1	60	5,000	11	592	334	26,890	89.3	90.8
Utah	415	20,991	100.0	100.0	28	1,609	39	1,147	454	22,138	100.0	100.0
Vt	681	33,804	73.5	71.9	112	4,040	207	7,258	888	41,062	62.1	61.7
Va	995	57,649	100.0	100.0	105	7,750	55	1,818	1,052	59,802	100.0	100.0
Wash	451	26,345	100.0	100.0	104	5,884	32	966	483	27,311	100.0	100.0
W. Va Wis Wyo	77 3,026 28	3,877 128,895 1,134	52.4 100.0 100.0	58.6 100.0 100.0	18 524 4	934 22,873 252	8,328 31	76 258,662 1,499	140 11,354 59	5,437 387,557 2,633	62.2 76.2 100.0	62.2 78.1 100.0
Total or percent-	35,889	1,704,670	92.3	82.8	4,570	213,478	19,143	597,723	55,564	2,327,812	83.8	78.8

Includes WADAM Testing: Georgia, 26 herds, 3,484 cows; Illinois, 113 herds, 3,500 cows; Kentucky, 11 herds, 300 cows; Louisiana, 165 herds, 10,467 cows; Mississippi, 10 herds, 400 cows; New Hampshire, 2 herds, 153 cows; New Jersey, 1 herd, 165 cows; North Carolina, 81 herds, 3,700 cows; North Dakota, 52 herds, 856 cows; Tennessee, 3 herds, 175 cows; Texas, 5 herds, 400 cows; Virginia, 2 herds, 335 cows; West Virginia, 61 herds, 1,484 cows.

Total - 532 herds, 25,419 cows.

Percent of Standard DHIA and DHIR herds or cows enrolled in machine-processing.

Based on last report available (1-1-65).

TABLE 7.--Ten-year production summary: U.S. cows and DHIA cows (1956-1965)

		U. S. Report					Standard Plan DHIA,			All DHIA plans		
	Milk cows 1/	Milk	Production/cow Milk Fat Fat				production/cow			DHIA cows as pct.		
Year			*		Fat	Milk		Fat	Cows	of U. S. cows		
	Thousands	Mil. Lb.	Lb.	Pct.	Lb.	Lb.	Pct.	Lb.	Thousands	Pct.		
1956	20,501	124,860	6,090	3.83	233	9,713	3.94	383	<u>2</u> /1,906	<u>2</u> /9.3		
1957	19,774	124,628	6,303	3.81	240	9,894	3.93	389	2,118	10.7		
1958	18,711	123,220	6,585	3.78	249	10,068	3.91	394	2,232	11.9		
1959	17,901	121,989	6,815	3.76	256	10,327	3.88	401	2,439	13.6		
1960	17,560	122,951	7,002	3.76	263	3/10,561	<u>3</u> /3.87	<u>3</u> /409	2,594	14.8		
1961	17,367	125,442	7,223	3.75	271	10,796	3.87	418	2,727	15.7		
1962	17,050	126,021	7,391	3.73	276	11,032	3.86	426	2,784	16.3		
1963	16,534	125,009	7,561	3.72	281	11,286	3.85	434	2,823	17.1		
1964	16,061	127,000	7,907	3.71	293	11,685	3.83	447	2,963	18.4		
1965	<u>4</u> /15,477	<u>4</u> /125,061	<u>4</u> /8,080	4/3.70	<u>4</u> /299	11,976	3.82	457	2,955	19.1		

^{1/} Average number of milk cows on farms during year, excluding heifers not yet fresh; estimated by the Statistical Reporting Service.

^{2/} Report of WADAM testing included for first time.

^{3/} National testing year changed in 1960 to begin May 1. These values are averages of 1959 and 1961.

^{4/} USDA Statistical Reporting Service, Milk Production and Dairy Products, Annual Statistical Summary 1965, February 1966. Data are preliminary.

TABLE 8.--Counties, by State, with 25 percent or more cows included in the National Cooperative Dairy Herd Improvement Program (January 1, 1966)

State County	Cows enrolled in DHIA plans	State	County		nrolled A plans	State	County	Cows en		State	County	Cows enrolle in DHIA plan
	Percent			Per	cent			Perc	ent			Percent
ALABAMA		FLORIDA	A (con't.)			KANSAS	(con't.)			MONTAN	A	
Montgomery	46		nole			Salin	e	4	3	Call.	stin	42
Blount Elmore			raon				ns y			CBSC	ade	25 25
Talladega	33	Alaci	nua		35	Harne	r	3	4	LIBC	ne ad	
Jefferson	32		2r			Harve	y	3	4	NEBRAS	KA.	
Russell	31					Edwar	ds	3	2			25
St. Clair		Saras	sota		26		n					25
Etowah Shelby		CEORGIA								Sewa	rd	25
She iby	25		1 1		RR.	Reno-		2	9	NEVADA		
ARIZONA		Houst	con		81		y					100
Pima			2r							Clar	k	81
Greenlee			on			LOUISIA		•	,	Chur	chill	57
Pinal	8/		las erson				er ita			Doug	las	51
Graham		Rocke	iale		69	Frank	lin	3	4	wasn	oe	38
Maricopa	58		ke			West	Carroll	3	2	NEW HA	MPSHIRE	
		Mitch	hell		62	Linco	1n	3	1	Sul1	ivan	49
CALIFORNIA	0.0	Butte	s		60	Iberi	a	3	0	Merr	imack	45
Monterey Contra Costa		Rabu	n		60		and es			Ches	hire	44
Santa Barbara		Thom	as		56		egard			Crof	sporougn	39
Madera	65	Wortl	h		55	Deadi	-bar a		-	Rock	ingham	31 30
Ventura	65	Jeff	Davis		54	MAINE				Coos		29
Marin	63	Peacl	h		54	0xfor	d			Be1k	nap	27
San Diego	63		ding			Andro	scoggin	4	0	Stra	fford-Carro	011 26
Kern Lassen		Walte	on tur		49	Cumbe	rland scot	3	0	ATT	n CEN	
Fresno	58	Jeca	8		47	Somer	set	2	.7	NEW JE		37
Riverside		Lee-			45	York-		2	7	Bur 1	ington	35
Del Norte	56	Monre	00		45	Hanco	ck	2	6	Morr	is	27
San Joaquin	54	Faye	tte		43	Waldo		2	.6	Sale	m-Cumberlar	nd 26
Sonoma		Rich	mond		43	MADVIAN	T.			ATTEC - ACT	WT GO	
Tehama Tulare	52	Bald	win		42	MARYLAN	о d	5	2	NEW ME		72
San Luis Obispo		Clay	ton		41		ester			Oter	. Alla	27
Stanislaus	50	Brook	ks		40	Monte	omery	3	5			25
Merced	48	Tatti	na11		40	Carro	11	3	0			
Placer		De K	alb		38	Harfo	rd	3	0	NEW YO		
Sacramento		Floy	d ffie		38					Onta	rio	48
San Bernardino- Napa		Corre	oll		30 35	Kent-			. 7	COLU	mola	46 45
Nevada	41	Dool:	y		35	MASSACH	USETTS					45
Colusa	40	Trou	, D		34	Berks	hire	4	0			42
Santa Clara	39	Laur	ens		33	Frank	lin	3	3			41
Shasta		Morg	an		31	Hamps	hire	3	3	Wayn	ie	36
Kings	36	Hear	d tosh		30		table			Onan	daga	34 33
San Benito Solano	35	Polk	tosn		30	Worce	ster	2	9	Schu	ngston	33
Sutter	35		y				uth			Scho	harie	32
Los Angeles	33	Walk	er		28	•				Orle	eans	32
Inyo	31					MICHICA	N		_			31
Yuba		Doug	herty		27	Oscoc			1.1	Niag	ara	31
Humboldt Tuolumne	28	TITTNO	T.C.			Ingha	m		11	Cayu	ıga	30 29
Glenn	26	ILLINO	euce		48	Kalan	azoo	3	8			29
Greittianananan		Star	k		39	Barry		3	37	Wyon	ning	29
COLORADO			all			Calho	un	3	37	Cort	land	2/
Chaffee	39	Jasp	er		35	Jacks	on		35	Chau	itauqua	25
Pueblo Delta	34	Chri	stian rd		33	Sniav	assee		33 31	Tiog	3a	25
Mesa	29	Rond			31		on			NORTH	CAROLINA	
Huerfano	25	Cham	paign		28	Hills	dale	3	31	Cart	teret	100
Weld	25	Cole	8		28	Muske	gon	3	31	Lee-		100
		Jeff	erson		27	St.	loseph			Swat	n	100
CONNECTICUT		МсНе	nry		27	Crati	ot		30 30	Hyde	<u>}</u>	88 82
Tolland Litchfield	52 45	Monr	oe sh		26		6			Harr		80
Windham	41	De K	alb		25	Eator	1		29			77
Hartford	40	20 10				Alger		:	26	Nast	h	75
New Haven	38	INDIAN	A			Berr	len		26	Perd	quimans	67
Middlesex	36	Cass			29		see					64
New London	25		le		28	Mason	n		26 26		on	63
DET ALIADE		ETK	art		20		Buren			Oras	1001	61
DELAWARE Sussex	39	IOWA				Iosco)		25	RTIII	newick	60
Jabber	,	Dall	.as		35	Lape	er		25	Moor	re	60
FLORIDA		Webs	ter		35	•				Casv	well	58
070700	69	Lee-			30	MINNES	OTA		20	Pam:	Lico	57
Manatee Cilchrist	65	Polk	:		28	Dako	a		32	Lend)1r	56 56
Cilchrist		Stor	y		27	Cood	nue ey		28	Wake	110	56
Osceola	bu	Sac-	er		26	Winor	ia		27	Cui	lford	52
Jackson	34 51	Jasp	,			Mart	n		26	Bert	tie	50
Putnam	51	KANSAS	3			Olms:	ted		26	Col	umbus	50
Madison		Come	nche		44	MISSOU				Jone	28	50
		Pawr	iee		44				20	New	Hanover	50

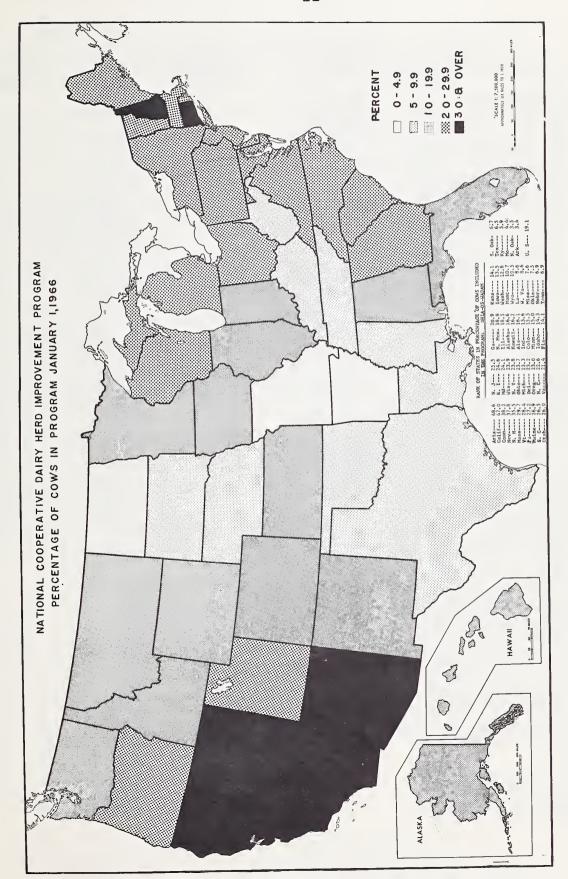


TABLE 8.--Counties, by State, with 25 percent or more cows included in the National Cooperative Dairy Herd Improvement Program--Continued (January 1, 1966)

ate County	Cows enrolled in DHIA plans		Cows enrolled in DHIA plans	State County	Cows enroll in DHIA pla
ace Country	Percent	State Country	Percent	Beare Country	Percent
				TTT (
RTH CAROLINA (con'		OREGON (con't.)	25	UTAH (con't.)	<i>L</i> 1
Onslow Warren		Multnomah	23	Washington Salt Lake	30
Washington		PENNSYLVANIA		Utah	
Wilson		Montgomery	45	Davis	
Wayne		Union		Sanpete	
Bladen		Blair		Weber	
Gaston		Bucks			
Craven		Clinton		VERMONT	
Granville		Dauphin		Bennington	46
Montgomery	43	Mifflin	36	Windsor	39
Chatham	42	Northumberland	35	Addison	
Edgecomb		Huntingdon		Washington	
Franklin		Juniata		Rutland	
Madison		Lancaster		Windham	30
Randolph		Potter		Orange	
Catawba		Lebanon		Franklin	
Cumberland		Montour	33	Orleans	20
Halifax		Allegheny	32	VIDCINIA	
Martin		Perry Berks		VIRGINIA	68
Northampton		Cumberland		Northampton James City	
Pender		Luzerne	31	Lancaster	
Robeson		Sullivan		Powhatan	
Rowan		Chester		Clarke	
Scotland		Centre		City of Va. Beac	
Stanly		Columbia		City of Chesapea	
Cleveland		McKean		Culpeper	
lenderson	31	Indiana		Prince George	
Po1k	31	Franklin		Bath	
Jnion	31	Lehigh		Henrico	
Burke		Wyoming		Loudoun	38
orsyth		Northampton		Pulaski	
Johnston		York		Southampton	37
Vatauga		Cambria	25	Dinwiddie	
Sampson				Orange	35
Alamance		RHODE ISLAND		Isle of Wight	34
Davie		Washington	39	Augusta	33
Caldwell		Kent	35	Madison	
Yadkin	26			Amelia	
		SOUTH CAROLINA		Rockingham	
IO	FO	Orangeburg	49	Warren	
Sandusky		Sumter		King William	
Marion Medina		Bamberg Kershaw		Brunswick	
Erie		Saluda		Charlotte Prince William	
Lorain		Hampton		Hanover	28
Allen		Newberry		Fauquier	
Fulton		Jasper	37	Roanoke	26
Auglaize		Colleton		Spotsylvania	
Clark		Marlboro		Spotts) Ivaniza	
Logan	37	Lee		WASHINGTON	
Champaign		Beaufort		Mid-Columbia	37
1iami		Laurens		Grant	
\shland					
airfield		TEXAS		WEST VIRGINIA	
Vayne		Wichita		Mason	31
Henry		Deaf Smith			
luron		Goliad		WISCONSIN	
lood		Hutchinson		Kenosha	44
ranklin		San Patricio		Winnebago	42
Holmes		Starr		Kewaunee	
Richland		Burleson		Manitowac	
lamilton Seneca		Milam		Racine Rock	
Seneca		Willacy Kaufman		Rock Calumet	33
леене		Bell		Walworth	
)ttawa		Camp		Green Lake	31
She1by		Walker		Waukesha	31
Jefferson		Wheeler		Columbia	
Portage	26	Cameron		Fond du Lac	30
√arren		Castro		Dunn	29
Villiams		Randall	25	Outagamie	29
	20	runu1		Barron	28
EGON		UTAH		Brown	26
2GUN	40	Wasatch	48	St. Croix	26
		Piute	45	Shebovgan	26
KlamathBenton					
KlamathBenton	35	Summit		Florence	25
KlamathBentonBenton	35 34			Florence	25 25
Honder Head State	35 34 32			Florence	25 25

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